## **CLAIMS**

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- 1. A system for use on an electronic network for negotiating contracts between at least one buyer and at least one seller, in which proposals may be made or called for by buyers and/or sellers, and in which each party is represented by a software agent.
- 2. A software agent for a party conducting electronic trading, comprising a transaction engine; a negotiation engine driven by the transaction engine; and a store of a plurality of negotiation profiles; and control means responsive to the commercial situation or state of the party to select the optimal negotiation profile appropriate to that situation or state, and to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.
- 3. A method of performing automated reverse auction on an electronic network using software agents for buyers and sellers.
- 4. A method according to Claim 3, in which the software agent for each buyer and each seller comprises a transaction engine; a negotiation engine driven by the transaction engine; and a store of a plurality of negotiation profiles; and control means responsive to the commercial situation or state of the party to select the optimal negotiation profile appropriate to that situation or state, and to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.
  - 5. A method of automated bi-lateral negotiation in which buyers' agents cooperate to produce a call for proposal to purchase collectively from one or more seller.
- 25 6. A method according to Claim 5, in which each buyer is represented by a software agent.

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- 7. A method according to Claim 5, in which each seller is represented by a software agent.
- 8. A method according to Claim 5, comprising the use of an intermediate software agent between the buyers and the or each seller, for negotiating a contract between the or each seller and the collective buyers.
- 9. A method according to Claim 6, in which each software agent comprises a transaction engine; a negotiation engine driven by the transaction engine; and a store of a plurality of negotiation profiles; and control means responsive to the commercial situation or state of the party to select the optimal negotiation profile appropriate to that situation or state, and to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.
- 10. An intermediate re-selling software agent for use on an electronic network for negotiating contracts between at least one buyer and at least one seller, by purchasing from a seller and re-selling it to a buyer.
- 11. An intermediate re-selling software agent according to Claim 10, which comprises a transaction engine; a negotiation engine driven by the transaction engine; and a store of a plurality of negotiation profiles; and control means responsive to the commercial situation or state of the party to select the optimal negotiation profile appropriate to that situation or state, and to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.
- 12. An intermediate negotiation system for e-commerce comprising multiple software agents capable of being engaged by buyers and/or sellers, and an interface for negotiating contracts between respective agents of at least one buyer and at least one seller.

- 13. An intermediate negotiation system according to Claim 12, arranged to conduct an automated reverse auction on an electronic network using software agents for buyers and sellers.
- 14. An intermediate negotiation system according to Claim 12, in which each software agent comprises a transaction engine; a negotiation engine driven by the transaction engine; and a store of a plurality of negotiation profiles; and control means responsive to the commercial situation or state of the party to select the optimal negotiation profile appropriate to that situation or state, and to cause the transaction engine to initiate or conduct e-commerce negotiations using the negotiation engine programmed with the selected negotiation profile.
  - 15. A system according to Claim 1, in which each software agent is a component of a distributed architecture.
  - 16. A system according to Claim 12, in which each software agent is a component of a distributed architecture.
- 15 17. A method according to Claim 3, in which each software agent is a component of a distributed architecture.
  - 18. A method according to Claim 5, in which each software agent is a component of a distributed architecture.
- 19. A software agent according to Claim 2, in which the negotiation engine is a20 component of a distributed architecture.
  - 20. An intermediate re-selling software agent according to Claim 10, which is a component of a distributed architecture.
  - 21. An intermediate negotiation system according to Claim 12, which is a component of a distributed architecture.
- 25 22. A system according to Claim 1, in which the software is implemented as FIPA open source.

- 23. A communications network comprising a system according to Claim 1.
- 24. A communications network according to Claim 23, in which the network consists of the Internet.
- 25. A computer program for creating a system according to Claim 1.
- 5 26. A computer program for creating a software agent according to Claim 2.